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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,380	02/07/2006	Atsushi Tanno	OGW0420	9651
24978 7590 07/15/2008 GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606				
EXAMINER				
FISCHER, JUSTIN R				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
07/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,380

Applicant(s)

TANNO, ATSUSHI

Examiner

Justin R. Fischer

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-15 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6, 7, 10-15 and 19 is/are rejected.
- 7) ☒ Claim(s) 9, 18 and 20-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6, 7, 10-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (US 6,343,635, newly cited). As best depicted in Figure 6, Hsu teaches a tire wheel assembly comprising a shell structure or inner tube 20 having a plurality of pegs or particles 202 fixed thereon (define rough surface portion having irregularities). It is noted that the claims as currently drafted do not distinguish the pegs of Hsu from the claimed particles. Also, it is evident from Figure 6 that different cross hatchings are used for the pegs and inner tube, which suggests that the pegs or particles are separately fixed to said inner tube.

As to the height of said pegs or particles, Hsu suggests the inclusion of said pegs in order to form air circulation channels 103. While the reference is completely silent with respect to the height of the pegs, it is evident that the general inclusion of said pegs, independent of height, creates a series of air circulation chambers. One of ordinary skill in the art at the time of the invention would have found it obvious to select a peg height between 0.1 and 5.0 mm, more preferably between 0.1 and 3.0 mm, since the peg height does not appear to be critical to Hsu as long as air circulation channels

are formed. Furthermore, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed dimension.

Lastly, with respect to the independent claims, one of ordinary skill in the art at the time of the invention would have found it obvious to form the shell structure with a height between 10 and 70% of the cross-sectional height of the tire. It is clearly evident that the inner tube or shell structure has some height and furthermore, that the height is significantly less than that of the cross-sectional height of the tire (spaced from tire by protection cushion 10). Additionally, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed dimension.

Regarding claim 11, the defined thickness values are consistent with those commonly associated with inner tube constructions.

As to claims 15 and 19, the shell structure or inner tube of Hsu can be viewed as having an "arch like" cross-sectional shape. It is emphasized that the claims as currently drafted do not require an arch-shaped construction but rather an "arch like" cross-sectional shape.

Allowable Subject Matter

3. Claims 1-5 are allowed.
4. Claims 9, 18, and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. The indicated allowability of claims 6 and 13 is withdrawn in view of the newly discovered reference(s) to Hsu. Rejections based on the newly cited reference(s) are set forth above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/567,380

Page 5

Art Unit: 1791

Justin Fischer

/Justin R Fischer/

Primary Examiner, Art Unit 1791